

## BIOTROL 407

### 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** BIOTROL 407  
**Common Name:** Mixture  
**SDS Number:** 0165  
**Product Code:** BI0034  
**Revision Date:** 5/11/2016  
**Version:** 2  
**Internal ID:** 200D  
**Product Use:** Water Treatment  
**Supplier Details:** U.S. Water Services  
12270 43rd St. NE  
St. Michael, MN 55376

**Contact:** Non-emergency #: 866-663-7632  
**Email:** SDS@uswaterservices.com  
**Web:** www.uswaterservices.com

**EMERGENCY RESPONSE: (ChemTel)**  
**US & Canada: 800-255-3924**  
**International: +01-813-248-0585**

### 2 HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

##### GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Health, Skin corrosion/irritation, 1 A  
Health, Acute toxicity, 5 Inhalation  
Health, Acute toxicity, 4 Dermal  
Health, Acute toxicity, 4 Oral  
Physical, Corrosive to Metals, 1

#### GHS Label Elements, Including Precautionary Statements

**GHS Signal Word:** **DANGER**

##### GHS Hazard Pictograms:



##### GHS Hazard Statements:

H314 - Causes severe skin burns and eye damage  
H333 - May be harmful if inhaled  
H312 - Harmful in contact with skin  
H302 - Harmful if swallowed  
H290 - May be corrosive to metals

##### GHS Precautionary Statements:

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P102 - Keep out of reach of children.

P281 - Use personal protective equipment as required.

P302+352 - IF ON SKIN: Wash with soap and water.

P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

### Hazards not Otherwise Classified (HNOC) or not Covered by GHS

## 3 COMPOSITION/INFORMATION ON INGREDIENTS

### Ingredients:

Cas#	%	Chemical Name
1310-73-2	1-5%	Sodium hydroxide
1004542-84-0	15-25%	Sulfamic Acid, N-Bromo, Sodium Salt

## 4 FIRST AID MEASURES

- Inhalation:** Remove from contamination. If person has stopped breathing administer artificial respiration. Seek medical attention.
- Skin Contact:** Wash off with soap and plenty of water. Remove contaminated garments and wash or destroy. Seek medical attention if irritation develops. Consult a physician if irritation develops.
- Eye Contact:** Flush eyes with plenty of running water for 15 minutes. Seek medical attention.
- Ingestion:** If conscious, give plenty of water. If discomfort or other symptoms develop, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

**Most important symptoms & effects (acute & delayed):** No data available

**Indication of need for immediate medical attention:** None

**Special treatment needs:** None

## 5 FIRE FIGHTING MEASURES

- Flash Point:** None
- Flash Point Method:** Pensky Martens Closed cup
- Burning Rate:** No data available
- Autoignition Temp:** No data available
- LEL:** Not applicable
- UEL:** Not determined.

### Extinguishing Media:

**Suitable:** Use extinguishing media suitable for surrounding fire.

**Unsuitable:** No information available

**Hazardous combustion products:** In the event of combustion, nitrogen, bromine, hydrobromic acid vapors or gases may be formed.

**Unusual Fire or Explosion Hazards:** Material is a strong oxidizer. May combine with various metals (at decomposition) to form further flammable mixtures.

**Special protective equipment/precautions:** Wear self-contained breathing apparatus

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### 6 ACCIDENTAL RELEASE MEASURES

**Spill/Leak procedures:**

**Small Spill:** Wear appropriate personal protective equipment. Contain with absorbent material such as clay or inert absorbent. Shovel reclaimed liquid and absorbent into recovery or salvage drums for disposal. Follow all Federal, State and local regulations. See Section 13 for disposal considerations.

**Large Spill:** Dike to prevent further movement. Recover by pumping or by using a suitable absorbent. Reclaim into recovery or salvage drums. This product can be neutralized of its halogen (active ingredient) components by sprinkling sodium metabisulfite or sodium sulfite on the spilled material. Wash site of spillage thoroughly with water. Follow all Federal, State and local regulations. See Section 13 for disposal considerations.

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120)

### 7 HANDLING AND STORAGE

**Handling Precautions:** Avoid contact with eyes, skin, or clothing. Do not taste or swallow. Do not inhale vapor or mist. Use with adequate ventilation. For industrial use only!

**Storage Requirements:** Keep away from children. Store in closed containers away from temperature extremes and incompatible materials.  
Store in properly labeled containers in accordance with all local, state and federal guidelines.

### 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** Provide local exhaust ventilation as needed to control misting.  
**Personal Protective Equipment:** HMIS PP, D | Face Shield and Eye Protection, Gloves, Apron

Respiratory protection: If needed use MSHA/NIOSH approved respirator for dusts and mists. Seek professional advice prior to respirator selection and use. Follow all requirements of OSHA respirator regulations (29 CFR 1910.134)

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

General Hygiene: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, using the toilet, or applying cosmetics.

PPE recommendation is advisory only and based on typical use conditions. An industrial hygienist or safety officer familiar with the specific situation of anticipated use must determine actual PPE required when using this product (29 CFR 1910.132)

**Exposure Limits:**  
**OSHA (TWA)/PEL:**

(Sodium Hypochlorite) OSHA/PEL 1.5 mg/m<sup>3</sup>  
(Sodium Hydroxide) NIOSH/REL 2 mg/m<sup>3</sup>, OSHA/PEL  
TWA 2 mg/m<sup>3</sup>

**ACGIH (TWA/TLV):** Not Established

**BIOTROL 407****9 PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Golden	<b>Odor:</b>	No appreciable odor
<b>Physical State:</b>	Liquid	<b>Solubility:</b>	Complete in water
<b>Odor Threshold:</b>	Not determined	<b>Freezing/Melting Pt.:</b>	<32°F
<b>Spec Grav./Density:</b>	10.68-11.01 lb/gal	<b>Flash Point:</b>	None
<b>Viscosity:</b>	Not determined	<b>Vapor Density:</b>	Similar to water
<b>Boiling Point:</b>	Not determined	<b>Auto-Ignition Temp:</b>	Not determined
<b>Partition Coefficient:</b>	Not determined	<b>UFL/LFL:</b>	Not determined
<b>Vapor Pressure:</b>	Similar to water		
<b>pH:</b>	>13		
<b>Evap. Rate:</b>	Not determined		
<b>Decomp Temp:</b>	Not determined		

**10 STABILITY AND REACTIVITY**

<b>Reactivity:</b>	Reactive with oxidizing agents, reducing agents, organic materials, metals, acids, and alkalis.
<b>Chemical Stability:</b>	Product is stable under normal storage and use conditions. Stable for up to 1 year stored under normal conditions
<b>Conditions to Avoid:</b>	Avoid contact with strong acids and oxidizers, incompatible materials and cold temperatures
<b>Materials to Avoid:</b>	Strong reducing agents such as sulfite and metabisulfite, strong acids and bases. Never mix this product with undiluted sodium hypochlorite bleach. The mixture will result in a violent exothermic reaction that produces a great deal of heat and nitrogen gas bubbles. perchlorates, concentrated oxygen, permanganates) which can generate heat, fire, explosions, and the release of toxic fumes.
<b>Hazardous Decomposition:</b>	Nitrogen oxides, bromine and hydrobromic acid vapors
<b>Hazardous Polymerization:</b>	Will not occur.

**11 TOXICOLOGICAL INFORMATION**

<b>Acute Toxicity:</b>	
Oral LD <sub>50</sub> (albino rats):	>5,000 mg/kg
Dermal LD <sub>50</sub> (albino rats):	>2,000 mg/kg
Inhalation LC <sub>50</sub> (rats):	>2.13 mg/L
<b>Skin Corrosion/Irritation:</b>	Irritant
<b>Serious eye damage/irritation:</b>	Acute Irritant
<b>Respiratory or skin sensitization:</b>	No data available
<b>Specific target organ toxicity (single exposure):</b>	No data available
<b>Specific target organ toxicity (repeated exposure):</b>	No data available
<b>Aspiration hazard:</b>	No data available
<b>Carcinogenicity:</b>	No carcinogenic effects are known for the components of this product
<b>Germ Cell Mutagenicity:</b>	No mutagenic effects are known for the components of this product
<b>Teratogenicity:</b>	No teratogenic effects are known for the components of this product

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### ECOLOGICAL INFORMATION

**Aquatic Toxicity-** Results below are based on the active product (reported as Cl2).

Avian Exposure

Upland Game Birds:

Acute oral LD<sub>50</sub>: > 2,510 mg/kg

Subacute Dietary LC<sub>50</sub>: > 5,000 mg/kg

Aquatic Data

Cold Water Fish, acute toxicity, LC<sub>50</sub>: 1.35 ppm (max- 96hr)

Warm Water Fish, acute toxicity, LC<sub>50</sub>: 2.1 ppm (max-96 hr)

Invertebrate (D. magna), acute toxicity, LC<sub>50</sub>: 2.3 ppm (max-48 hr)

**Elimination** (persistence & degradability): No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**Other adverse effects:** No data available

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### DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

This material should be fully characterized for toxicity and possible reactivity prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

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### TRANSPORT INFORMATION

UN1760, Corrosive liquids, n.o.s., 8, PGIII, (Bromide Salts)

DOT Transportation data (49 CFR 172.101)

See section 15 of SDS for information on Reportable Quantity chemicals (RQ)

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### REGULATORY INFORMATION

**Component (CAS#) [%] - CODES**

RQ(1000LBS), Sodium hydroxide (1310-73-2) [1-5%] CERCLA, CSWHS, MASS, OSHAWAC, PA, TSCA, TXAIR

**Regulatory CODE Descriptions**

RQ = Reportable Quantity

CERCLA = Superfund clean up substance

CSWHS = Clean Water Act Hazardous substances

MASS = MA Massachusetts Hazardous Substances List

OSHA WAC = OSHA Workplace Air Contaminants

PA = PA Right-To-Know List of Hazardous Substances

TSCA = Toxic Substances Control Act

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### TXAIR = TX Air Contaminants with Health Effects Screening Level

**TSCA:** All components of this product are listed (or are not required to be listed) in the TSCA inventory

### EPA / CERCLA / SARA TITLE III:

**Toxic Chemical List (SARA 313):** This product does not contain any chemicals subject to routine annual toxic chemical release reporting.

**Extremely Hazardous Substance (SARA 302/304):** This product does not contain any extremely hazardous substances subject to emergency planning requirements.

**SARA 312:** Acute

**RCRA:** Corrosive, D002

**California Proposition 65:** This product does not contain any proposition 65 chemicals.

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### OTHER INFORMATION

HMIS III: Health = 2, Fire = 0, Physical Hazard = 0

HMIS PPE: D - Face Shield and Eye Protection, Gloves, Apron

HMIS	
HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	D

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**Revision Notes:** Updated to GHS format

### Disclaimer:

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